Zero-Latency Mechanism for Periodic Signal Amplification of EM In-Flight and Jamming of Helical Signals

1 November 2025
Simon Edwards
Research Acceleration Initiative

Introduction

Building upon the other of two publications dated 1 November 2025, a spinless photon emitter or RSL (Recursively Split Light) emitter may be used in order to boost ambient EM already in flight in such a manner that no distortion or latency is introduced as in standard EM relays.

Abstract

By creating chains of the 1 November 2025 mechanism for recursively splitting light waves until spinless photons are generated which are ultimately absorbed into local ambient EM, weak signals may be amplified either for the purpose of communications or triangulation of weak signals by a series of such mobile, roving emitters, perhaps affixed to airborne drones. If a series of drones at a spacing of, perhaps, a mile, for example, came into alignment relative to a covert transmitter and our receiver, the boosting of the signals would reveal the presence of the covert transmission and additional boosters could be moved into position to facilitate intercept of the signals on an ongoing basis, for example.

Boosters of this variety could be used in order to facilitate amplification of our own transmitted signals in only a particular direction. As beam collimation has natural limits and as we must be concerned with the possibility of the capture of signals by an adversary which may emplace signal capture equipment position anterior to our our receivers; particularly in orbit; it may be advantageous to emit signals of an otherwise insufficient amplitude and to use the spinless photon emitters in order to amplify only those signals which are in-line with the orbital or other platforms. In this way, a signal of sufficient strength to reach our own platform is delivered, but with superior collimation as ensured by the purposefully reduced amplitude of the imperfectly collimated portion of the signal.

This is particularly relevant for communications between various satellites in both Low- and High-Earth-Orbit as well as ground-to-ground communications predicated upon the emission of microwaves which can be captured from orbit.

Interestingly, employing an RSL emitter in proximity to the specialized helical beams increasingly used for ground-to-orbit uplinks would likely have the effect of de-helicizing the beams, meaning that *RSL emitters, which act as signal amplifiers with regard to all other types of EM, would act as jammers against helical beams*, which currently cannot be jammed by any known method. The uptake of substantial magnetically inert electrical energy into a helical beam would imply, necessarily, a shift in the polarity of the individual waves, with migrating polarization toward the RSL source being implied. As

helical beams are defined by a particular rotation of polarity, this would necessarily lead to de-helicization of the beam, its loss of the ability to resist atmospheric scattering and the failure of the carried data to arrive intact at the receiver.

Conclusion

The immediate development of RSL emitters is recommended given their multiple applications in electronic intercept and electronic warfare.